



## Chapter Six FINANCIAL PLAN

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# FINANCIAL PLAN



The analysis conducted in the previous chapters evaluated airport development needs based upon safety, security, potential aviation activity, and operational efficiency. The most important element of the master planning process, however, is the application of basic economic, financial, and management rationale to each development item so that the feasibility of implementation can be assured. The purpose of this chapter is to identify capital needs at Sierra Vista Municipal Airport and identify when these should be implemented according to need, function, and demand.

The presentation of the financial plan and its feasibility has been organized into three sections. First, the Airport's

capital needs are presented in narrative and graphic form. Secondly, funding sources on the federal, state, and local levels are identified and discussed. Finally, the Airport's operating fund is examined for its ability to support future capital needs.

## DEMAND-BASED PLAN

The successful implementation of the Sierra Vista Municipal Airport Master Plan will require sound judgement on the part of the City of Sierra Vista. Among the more important factors influencing decisions to carry out a recommendation are timing and airport activity. Both of these factors should be used as references in plan implementation.

While it is necessary for scheduling and budgeting purposes to consider the timing of airport development, the actual need for facilities is established by airport activity. Because forecasts beyond the short-term are more speculative, the demand for facility requirements identified in the Master



Plan may be subject to change. Proper master planning implementation suggests the use of airport activity levels (e.g., operations, enplanements, based aircraft, etc.) rather than time as guidance for development as these represent the demand for the facility. Tracking airport activity levels and then comparing these to forecast activity levels and facility requirements provides decision-makers with the ability to anticipate and plan for when actual facilities are needed.

## ***CAPITAL NEEDS AND COST SUMMARIES***

The previous chapters have established the specific facility needs of the airport.

The next step of the planning process is to determine a realistic schedule and cost for each development item. The program outlined on the following pages has been evaluated from a variety of perspectives and represents the culmination of a comparative analysis of basic budget factors, demand, and priority assignments.

The recommended improvements are grouped into four planning horizons based on five-year increments: Stages I through IV. Each year the City of Sierra Vista will need to re-examine the priorities for funding in the short-term period, adding or removing projects on the capital programming lists. **Table 6A** summarizes the key activity milestones for each planning horizon.

<b>TABLE 6A Planning Horizon Milestone Summary</b>					
	<b>1999</b>	<b>Stage I FY 2003- 2007</b>	<b>Stage II FY 2008- 2012</b>	<b>Stage III FY 2013- 2017</b>	<b>Stage IV FY 2018- 2022</b>
<b>Commercial Activity</b>					
Annual Enplanements	7,895	15,500	19,800	22,000	24,900
Annual Operations	2,000	2,760	3,040	3,200	3,360
<b>General Aviation Activity</b>					
Based Aircraft	54	72	93	115	142
Operations					
Local	9,212	13,600	17,500	21,700	26,800
Itinerant	6,670	9,800	12,700	15,700	19,400
Total General Aviation Ops	15,882	23,400	30,200	37,400	46,200
<b>Other Commercial/Air Taxi/Federal Agencies</b>					
Operations	1,361	1,500	2,000	2,500	3,000

While most projects will be demand-based, some will be dictated by design standards, safety, or rehabilitation needs. In putting together a listing of projects, an attempt has been made to include anticipated rehabilitation needs through the planning period and capital replacement needs. It is difficult, however, to project with certainty the scope of such projects when looking 20 years into the future.

**Exhibit 6A** summarizes capital needs for Sierra Vista Municipal Airport through the planning period of this master plan. An estimate has been included with each project of federal and state funding eligibility, although this amount is not guaranteed. **Exhibit 6B** graphically illustrates airfield staging and also depicts landside staging.

Individual project cost estimates account for engineering and other contingencies that may be experienced during the implementation of the project and are in current (2002) dollars. Due to the conceptual nature of a master plan, implementation of capital improvement projects should occur only after further refinement of their design and costs through engineering and/or architectural analyses. Capital costs in this chapter should be viewed only as estimates subject to further refinement during design. Nevertheless, these estimates are considered sufficient for performing the feasibility analyses in this chapter.

## STAGE I CAPITAL NEEDS

Stage I reflects the only planning horizon where the projects are correlated to specific years. This is because development within this initial period is concentrated on the immediate needs of the airfield and landside areas. Stage I capital needs are estimated at approximately \$15.4 million and are illustrated on **Exhibit 6B**.

Following the events of September 11, 2001, the FAA requested that FAR Part 107 airports enhance their airport security and provided additional funding for this purpose under the FAA's FY 2002 Airport Improvement Program (AIP). The FAA further advised its regional offices that the policies that restricted AIP funding were being temporarily lifted. What this means is that the FAA can use discretionary funding and will permit airports to use their entitlement funding for any security project (for equipment and facilities) that the Civil Aviation Security Field Office (CASFO) approves. These projects are not limited to either FAR Part 107 or FAR Part 108, but may include any project at an airport for the security protection of persons, baggage, and cargo on an airport or onboard aircraft. With this in mind, several security related projects have been included in the Stage I Airport Development Schedule. Specifically, these include the installation of a security fence around the airfield and other improvements in the commercial service and general aviation areas.

Some facilities for federal agencies have also been identified for this Stage. The estimated \$5 million for this facility reflects 33% of total Stage I development costs.

Airfield improvements are also identified in this stage. The existing Runway 12-30 has been identified for reconstruction, particularly its intersection with Taxiway D which needs to be strengthened in order to be used by heavier civilian aircraft.

In addition, the initiation of the northside parallel taxiway is planned, focusing on that area between Runway 12-30 and Runway 3-21. This requires the relocation of the VOR.

A variety of other projects are also identified for this stage which allow the Airport to meet short-term demand and provide general upgrades to existing equipment (Airport Rotating Beacon and ARFF vehicles).

## **STAGE II CAPITAL NEEDS**

The Stage II development program covers the five-year period from FY 2008 to FY 2012. These projects are illustrated on **Exhibit 6B**. The focus of this stage is the development of the general aviation area within the 203 acres. As the existing property is fairly well built out, obtaining the 203 acres and making it accessible and usable is key to the long-term success of the Airport and the complete implementation of this master plan. Once the land is acquired, roadways and taxiways will need to be developed to

utilize all of the area reserved for federal agencies, access other acreage, and provide a new automobile access to the commercial terminal area. Other development in the proposed acquisition area includes T-hangars, a second FBO or specialty shop, apron, taxilanes, and auto parking. This Stage also provides for the relocation of the Civil Air Patrol to new land, allowing for the expansion of the heliport area in the next Stage.

Stage II also address a critical factor to the use of the 203 acres: wastewater treatment. As part of the Environmental Assessment for the transfer and development of the 203 acres, the City is required to provide recharge of treated wastewater. This is to be accomplished either through an on-site treatment and recharge facility, to be located in the north corner of the new property, or the installation of sewer lines leading to either the Fort Huachuca or City wastewater treatment plant, where the wastewater would then be treated and recharged through their facilities. The actual cost of this item is dependent on the selected design and could be much higher than the \$650,000 identified.

Airside development in Stage II includes the realignment of the existing taxiway and the extension of Taxiway G to meet Taxiway J. In addition, this stage provides for the installation of approach lighting to Runway 8-26 (consistent with the time frame identified in ADOT's study) which is expected to be 100 percent funded through the FAA's Facilities and Equipment Program.

ITEM	TOTAL	FAA ELIGIBLE	STATE ELIGIBLE	LOCAL	PRIVATE/ LOAN
Stage I (FY 2003-2007)					
FY 2003					
1. Acquire 203 acres <sup>1</sup>	\$0	\$0	\$0	\$0	\$0
2. Relocate VOR	\$550,000	\$500,000	\$25,000	\$25,000	\$0
3. Replace Airport Rotating Beacon	\$75,000	\$68,300	\$3,350	\$3,350	\$0
4. Install Security Fence Around Airfield	\$1,195,000	\$1,100,000	\$47,500	\$47,500	\$0
5. Construct Federal Agency Ramp and Hangar(s) and Extend Airport Avenue	\$5,065,100	\$59,280	\$2,910	\$5,002,910	\$0
<b>FY 2003 Subtotal</b>	<b>\$6,885,100</b>	<b>\$1,727,580</b>	<b>\$78,760</b>	<b>\$5,078,760</b>	<b>\$0</b>
FY 2004					
6. Construct 2-way GA Taxiway	\$257,000	\$234,000	\$11,500	\$11,500	\$0
7. Expand Existing FBO Facility	\$55,750	\$0	\$0	\$55,750	\$0
8. Establish Helipads on Twy G	\$7,500	\$6,830	\$335	\$335	\$0
9. Security Improvements to Commercial Service and GA Areas	\$1,252,000	\$1,140,071	\$55,964	\$55,965	\$0
10. Wildlife Incursion Study	\$100,000	\$91,060	\$4,470	\$4,470	\$0
<b>FY 2004 Subtotal</b>	<b>\$1,415,250</b>	<b>\$1,237,961</b>	<b>\$60,769</b>	<b>\$116,520</b>	<b>\$0</b>
FY 2005					
11. Extend Taxiway J Between Runway 12-30 and Runway 3-21; Install MITL	\$2,700,000	\$2,458,620	\$120,690	\$120,690	\$0
12. Construct Box Hangars (4 Hangars)	\$300,000	\$0	\$0	\$300,000	\$0
<b>FY 2005 Subtotal</b>	<b>\$3,000,000</b>	<b>\$2,458,620</b>	<b>\$120,690</b>	<b>\$420,690</b>	<b>\$0</b>
FY 2006					
13. Replace ARFF Vehicles	\$500,000	\$455,300	\$22,350	\$22,350	\$0
<b>FY 2006 Subtotal</b>	<b>\$500,000</b>	<b>\$455,300</b>	<b>\$22,350</b>	<b>\$22,350</b>	<b>\$0</b>
FY 2007					
14. Add Wind Indicator to Existing AWOS	\$150,000	\$136,590	\$6,705	\$6,705	\$0
15. Reconstruct Runway 12-30	\$3,500,000	\$3,187,100	\$156,450	\$156,450	\$0
<b>FY 2007 Subtotal</b>	<b>\$3,650,000</b>	<b>\$3,323,690</b>	<b>\$163,155</b>	<b>\$163,155</b>	<b>\$0</b>
<b>Stage I Subtotal</b>	<b>\$15,450,350</b>	<b>\$9,203,151</b>	<b>\$445,724</b>	<b>\$5,801,475</b>	<b>\$0</b>
Stage II (FY 2008-2012)					
1. Construct New Access Road	\$186,550	\$169,872	\$8,339	\$8,339	\$0
2. Construct Taxiway D Extension	\$1,181,000	\$1,075,419	\$52,790	\$52,791	\$0
3. Perform Pavement Strength Analysis Runway 3-21	\$15,000	\$13,659	\$670	\$671	\$0
4. Realign Taxiway J Between Terminal and Runway 12-30; Construct Taxiway G Extension; Relocate MITL	\$3,325,000	\$3,027,745	\$148,627	\$148,628	\$0
5. Install MALSR Approach Lighting Runway 8-26	\$350,000	\$350,000	\$0	\$0	\$0
6. Install GPS Differential Unit Runway 8-26	\$100,000	\$91,060	\$4,470	\$4,470	\$0
7. Reconstruct Terminal Apron	\$450,000	\$409,770	\$10,115	\$20,115	\$0
8. Expand Commercial Service Terminal Building	\$202,000	\$183,941	\$9,029	\$9,030	\$0
9. Construct Wastewater Treatment Plant or Sewer Line Extension <sup>2</sup>	\$650,000	\$0	\$0	\$650,000	\$0

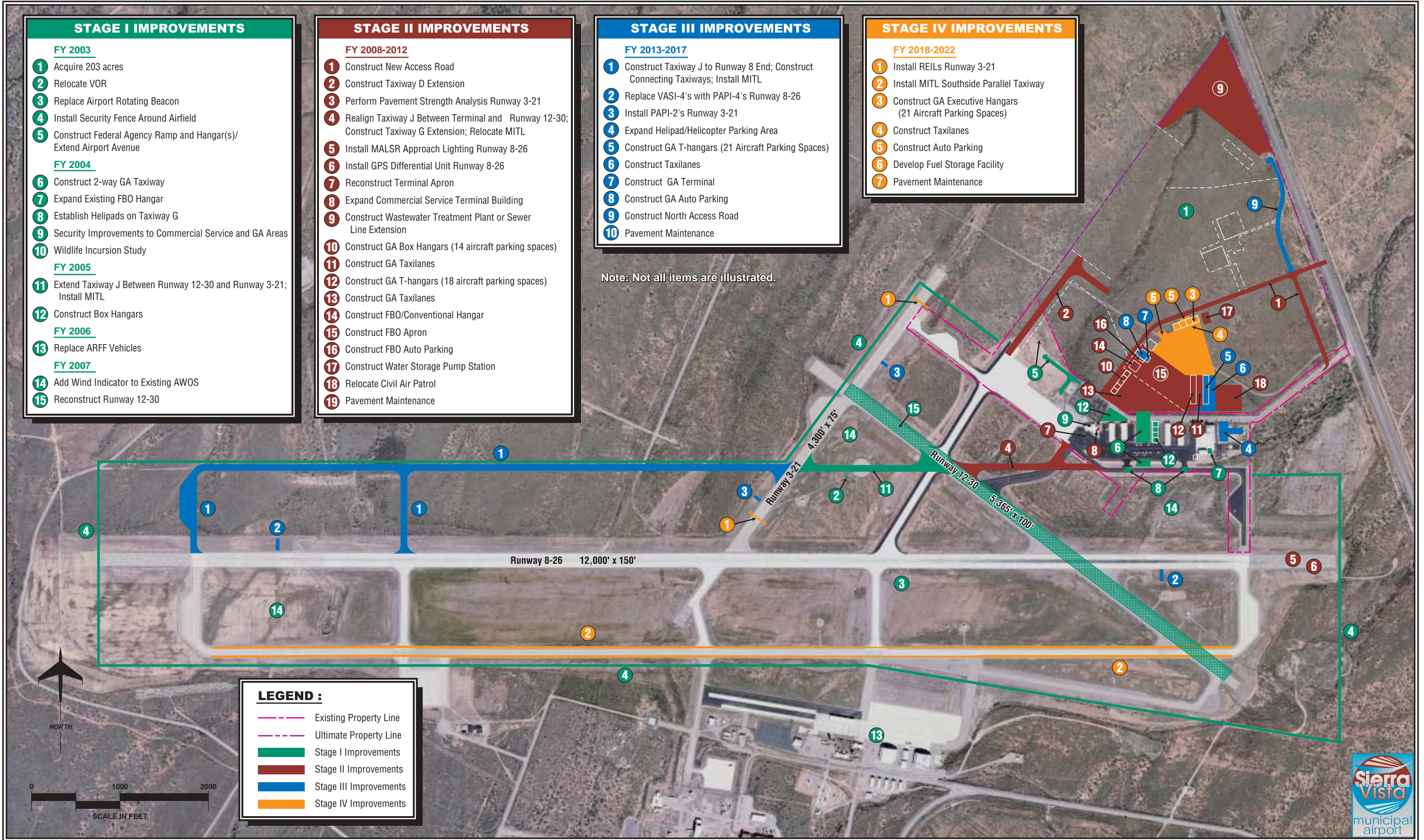
ITEM	TOTAL	FAA ELIGIBLE	STATE ELIGIBLE	LOCAL	PRIVATE/ LOAN
Stage II (continued)					
10. Construct GA Box Hangars (14 aircraft parking spaces)	\$397,800	\$0	\$0	\$397,800	\$0
11. Construct GA Taxilanes	\$131,200	\$119,471	\$5,864	\$5,865	\$0
12. Construct GA T-hangars (18 aircraft parking spaces)	\$468,000	\$0	\$0	\$468,000	\$0
13. Construct GA Taxilanes	\$210,100	\$191,317	\$9,341	\$9,342	\$0
14. Construct FBO/Conventional Hangar	\$325,000	\$0	\$0	\$325,000	\$0
15. Construct FBO Apron	\$2,000,000	\$1,821,200	\$89,400	\$89,400	\$0
16. Construct FBO Auto Parking	\$14,000	\$12,748	\$626	\$626	\$0
17. Construct Water Storage Pump Station	\$500,000	\$0	\$0	\$500,000	\$0
18. Relocate Civil Air Patrol	\$50,000	\$45,530	\$2,235	\$2,235	\$0
19. Pavement Maintenance	\$500,000	\$455,300	\$22,350	\$22,350	\$0
<b>Stage II Subtotal</b>	<b>\$11,055,650</b>	<b>\$7,967,032</b>	<b>\$363,856</b>	<b>\$2,714,662</b>	<b>\$0</b>
Stage III (FY 2013-2017)					
1. Construct Taxiway J to Runway 8 End; Construct Connecting Taxiways; Install MITL	\$5,900,000	\$5,372,540	\$263,730	\$263,730	\$0
2. Replace VASI-4's with PAPI-4's Runway 8-26	\$80,000	\$72,848	\$3,576	\$3,576	\$0
3. Install PAPI-2's Runway 3-21	\$50,000	\$45,530	\$2,235	\$2,235	\$0
4. Expand Helipad/Helicopter Parking Area	\$203,600	\$185,398	\$9,101	\$9,101	\$0
5. Construct GA T-hangars (21 Aircraft Parking Spaces)	\$546,000	\$0	\$0	\$546,000	\$0
6. Construct Taxilanes	\$133,700	\$121,747	\$5,976	\$5,977	\$0
7. Construct GA Terminal	\$523,900	\$0	\$471,510	\$52,390	\$0
8. Construct GA Auto Parking	\$55,200	\$0	\$49,680	\$5,520	\$0
9. Construct North Access Road	\$65,300	\$59,462	\$1,769	\$1,760	\$0
10. Pavement Maintenance	\$500,000	\$455,300	\$22,350	\$22,350	\$0
<b>Stage III Subtotal</b>	<b>\$8,057,700</b>	<b>\$6,312,825</b>	<b>\$829,927</b>	<b>\$912,639</b>	<b>\$0</b>
Stage IV (FY 2018-2022)					
1. Install REILs Runway 3-21	\$30,000	\$27,318	\$1,341	\$1,341	\$0
2. Install MITL Southside Parallel Taxiway	\$936,000	\$852,322	\$41,839	\$41,839	\$0
3. Construct GA Executive Hangars (21 Aircraft Parking Spaces)	\$500,000	\$0	\$0	\$500,000	\$0
4. Construct Taxilanes	\$330,000	\$300,498	\$14,751	\$14,751	\$0
5. Construct Auto Parking	\$14,000	\$12,748	\$626	\$626	\$0
6. Develop Fuel Storage Facility	\$250,000	\$0	\$0	\$250,000	\$0
7. Pavement Maintenance	\$500,000	\$455,300	\$22,350	\$22,350	\$0
<b>Stage IV Subtotal</b>	<b>\$2,560,000</b>	<b>\$1,648,186</b>	<b>\$80,907</b>	<b>\$830,907</b>	<b>\$0</b>
<b>GRAND TOTAL</b>	<b>\$37,123,700</b>	<b>\$25,131,194</b>	<b>\$1,720,414</b>	<b>\$10,259,683</b>	<b>\$0</b>

Notes: <sup>1</sup> The acquisition of land is expected to be obtained through a Public Benefit Transfer from the U.S. Department of Defense to the City of Sierra Vista.

<sup>2</sup> Portions of the utility system improvement cost may be eligible for non-aviation related state funding, including funding for economic development.









Finally, this stage also provides for pavement maintenance. The FAA and ADOT require Airports to develop pavement maintenance strategies and programs to ensure that aprons, taxilanes, taxiways, and runways last.

Expressed in 2002 dollars, Stage II is expected to cost approximately \$11.1 million to implement.

### **STAGE III CAPITAL NEEDS**

**Stage III** comprises the development items proposed between FY 2013 and FY2017 and is expected to cost approximately \$8.1 million (2002 dollars). These projects are illustrated on **Exhibit 6B**. Within this stage, the north side parallel taxiway (Taxiway J) is completed to the end of the runway. Other airside improvements include the installation of PAPIs on Runway 3-21 and Runway 8-26 (where they will replace the existing VASIs).

Stage III also provides for the expansion of the helipad/helicopter parking area, where the Civil Air Patrol is currently located. In addition, the new general aviation area will be expanded to accommodate T-hangars and a general aviation terminal building. Pavement maintenance is, again, a featured item.

### **STAGE IV CAPITAL NEEDS**

**Stage IV** comprises the development items proposed between FY 2018 and FY2022. These projects are illustrated on **Exhibit 6B**. The projects associated with this stage include the installation

of REILs to Runway 3-21, MITL to the southside parallel taxiway. In addition, further development of the general aviation expansion area is proposed, including hangars, taxilanes, automobile parking, and a fuel storage facility. Pavement maintenance is, again, a featured item. The total estimated cost for Stage IV development is approximately \$2.6 million (2002 dollars).

### **AIRPORT DEVELOPMENT COST SUMMARY**

The projects listed under each stage of the development program, as shown on **Exhibit 6A**, represent the basic budget factors and priority assignments for the airport development through the planning period. Although development items have been numbered, this is not intended to indicate an actual development priority. The construction of any development item should be based on the actual level of aviation demand at that time.

Cost estimates were developed utilizing data provided by construction industry resources as well as a review of actual costs on comparable airport projects. This information was applied to pavement, earthwork, and building size requirements for Sierra Vista Municipal Airport to determine the estimated construction costs. A 30 percent contingency for engineering, legal fees, and unforeseen costs is included in the estimates.

In future years, the cost shown in **Exhibit 6A** will need to be adjusted for inflation. This may be accomplished by



converting the interim change in the United States Consumer Price Index (USCPI) into a multiplier ratio through the following formula:

$$\frac{X}{Y} = Z \text{ (Change Ratio)}$$

X = USCPI in any given year

Y = USCPI in 2002 (11/95 = 177.4)

Z = Change Ratio

Multiplying the change ratio (Z) by any 2002-based cost estimate presented in this study will yield the adjusted dollar amounts appropriate in any future year. The local or state CPI may be used should the national CPI may not be representative of the City of Sierra Vista.

## ***CAPITAL IMPROVEMENTS FUNDING***

Financing future airport improvements will not rely exclusively upon the financial resources of the City of Sierra Vista. Airport improvement funding assistance is available through various grant-in-aid programs at both the state and federal levels. The following discussion outlines the key sources for airport improvement funding and how they can contribute to the successful implementation of this master plan.

### **FEDERAL GRANTS**

The United States Congress has long recognized the need to develop and maintain a system of aviation facilities across the nation for national defense

and promotion of interstate commerce. Various grants-in-aid programs to public airports have been established over the years for this purpose. The most recent legislation was enacted in early 2000, and is entitled the *Wendell H. Ford Aviation Investment and Reform Act for the 21<sup>st</sup> Century* or AIR-21.

This four-year bill covers fiscal years 2000-2003. This was breakthrough legislation because it authorized funding levels significantly higher than ever before. Airport improvement program funding was authorized at \$2.475 billion in 2000, \$3.2 billion in 2001, \$3.3 billion in 2002, and \$3.4 billion in 2003.

The source for AIR-21 funds is the Aviation Trust Fund. The Aviation Trust Fund was established in 1970 to provide funding for aviation capital investment programs (aviation development, facilities and equipment, and research and development). The Trust Fund also finances the operation of the FAA. It is funded by user fees, taxes on airline tickets, aviation fuel, and various aircraft parts. These funds are distributed each year by the FAA under authorization from the United States Congress. A portion of each year's authorized level of AIP funding is distributed to all eligible commercial service airports through an entitlement program that guarantees a minimum level of federal assistance each year. These dollars are calculated based upon enplanement and cargo service levels.

The remaining AIP funds are distributed by the FAA to airports based upon the priority of the project for

which they have requested Federal assistance. A National Priority Ranking System is used to evaluate and rank each airport project. Those projects with the highest priority are given preference in funding.

In Arizona, general aviation and non hub commercial airport development that meet FAA's eligibility requirements receive 91.06 percent funding from the AIP. Under the AIP program, examples of eligible development projects include property acquisitions, airfield improvements, aprons, and access roads. Passenger terminal building improvements (such as bag claim and public waiting lobbies) may also be eligible for a limited amount of FAA funding. Items such as automobile parking, fueling facilities, utilities, and hangar buildings, however, are not generally eligible for AIP funds.

To qualify for AIP funding an airport must be part of the *National Plan of Integrated Airport Systems (NPIAS)*. The 1998-2002 NPIAS identifies more than 3,540 airports (both existing and proposed) that are important to the national air transportation system. As discussed in Chapter One, Sierra Vista Municipal Airport is classified in the NPIAS as one of approximately 125 Nonprimary Commercial Service airports. Commercial service airports are defined as public airports receiving scheduled passenger service and having 2,500 or more enplaned passengers per year. There are 540 commercial service airports in the U.S. Of these, 413 have more than 10,000 enplanements and are classified as primary airports. Primary airports receive an annual

apportionment in Airport Improvement Program (AIP) funds, with the amount determined by the number of enplaned passengers. In 1998, Sierra Vista lost its Primary Commercial Service airport designation when annual enplanements fell below 10,000, and is, therefore, not currently eligible for annual entitlements. According to the aviation demand forecasts, this is expected to change as the City changes the way it markets the Airport to potential airlines.

## **PASSENGER FACILITY CHARGES**

Passenger facility charges (PFCs) were first authorized by Congress through the Aviation Safety and Capacity Act of 1990. Authorized agencies were allowed to impose a charge of as much as \$3 for each enplaned passenger. Under AIR-21, Congress has increased the PFC cap to \$4.50 per passenger.

Prior approval is required from the FAA before an airport is allowed to levy a PFC. FAA must find that the projected revenues are needed for specific, approved projects. Any AIP-eligible project, whether development or planning related is eligible for PFC funding. Gates and related areas for the movement of passengers and baggage are eligible as are on-airport ground access projects. Any project approved must enhance safety, security or capacity; reduce/mitigate noise impacts; or enhance competition among air carriers.

PFCs may be used only on approved projects; however, they can be used to fund up to 100 percent of a project.

They may be used as matching grants or to augment AIP-funded projects. PFCs can also be used for debt service and financing costs of bonds for eligible airport development. These funds may be commingled with general funds for bond debt service. Before submitting a PFC application, an airport must give notice and an opportunity for consultation to airlines operating at an airport.

A PFC higher than \$3.00 requires specific approval from the FAA. Specifically, the FAA must find that the project cannot be paid from funds reasonably expected to be available from the AIP. Additionally, if the project is an eligible surface transportation or terminal project, the FAA must find that the airport has made adequate provisions for financing the airside needs of the airport, including runways, taxiways, aprons, and aircraft gates.

PFCs are treated similar to other airport improvement grants rather than as airport revenues, and will be administered by the FAA. Participating airlines are allowed to retain up to eight cents per passenger for administrative handling purposes.

To date, Sierra Vista Municipal Airport has never imposed a PFC at the Airport. In the past, capital improvements have been funded through FAA and ADOT programs with the City providing a matching share.

While PFC's represent a viable funding source for the City, consideration should be given to how this charge would affect enplanements. At larger airports, the

\$4.50 charge on a ticket is inconsequential, but the cost of flying in/out of Sierra Vista Municipal Airport has been identified as a reason for potential passengers to utilize Tucson International Airport as an alternative. Nevertheless, it remains a funding option for the City.

As part of the financial analysis for the Airport, potential PFC revenues were examined for the planning period. These revenues, depicted in **Table 6B**, were based on the maximum allowable charge of \$4.50 per forecast enplaned passenger. For purpose of this analysis, it was assumed that only 85 percent of the enplaned passengers would be eligible for the PFC charge. Due to the PFC implementation process, it was assumed that PFC charges would not be available until the year 2005, at the earliest.

This analysis is provided solely as information for the City to consider during future funding evaluations. For the purposes of this study, it was assumed that no PFC levy would be applied during the planning period.

## **FAA FACILITIES AND EQUIPMENT PROGRAM**

The Airway Facilities Division of the FAA administers the national Facilities and Equipment (F&E) Program. This annual program provides funding for the installation and maintenance of various navigational aids and equipment for the national airspace system and airports. Under the F&E program, funding is provided for FAA

**TABLE 6B****Potential Passenger Facility Charge (PFC) Revenues  
Sierra Vista Municipal Airport**

<b>Year</b>	<b>Forecast Enplanements</b>	<b>Potential PFC Revenue</b>
<b>Stage I (2003-2007)</b>		
2003	12,379	\$0
2004	13,852	\$0
2005	15,500	\$59,288
2006	16,278	\$62,263
2007	17,095	\$65,388
<b>Subtotal Stage I</b>		<b>\$186,939</b>
<b>Stage II (2008-2012)</b>		
2008	17,953	\$68,670
2009	18,854	\$72,117
2010	19,800	\$75,735
2011	20,258	\$77,487
2012	20,727	\$79,281
<b>Subtotal Stage II</b>		<b>\$373,289</b>
<b>Stage III (2013-2017)</b>		
2013	21,207	\$81,117
2014	21,698	\$82,995
2015	22,200	\$84,915
2016	22,715	\$86,885
2017	23,243	\$88,904
<b>Subtotal Stage III</b>		<b>\$424,816</b>
<b>Stage IV (2018-2022)</b>		
2018	23,783	\$90,970
2019	24,335	\$93,081
2020	24,900	\$95,243
2021	25,478	\$97,453
2022	26,070	\$99,718
<b>Subtotal Stage IV</b>		<b>\$476,465</b>
<b>TOTAL FOR PLANNING PERIOD</b>		<b>\$1,461,510</b>

air traffic control towers, en route navigational aids such as VORs, and on-airport navigational aids such as PAPIs, and approach lighting systems.

The recommended MALSR approach lighting system for Runway 8-26 may be eligible for funding through the F&E program. Should the Airway Facilities



Division of the FAA install this navigational aid at the Airport, they would be operated and maintained by the FAA at no expense to the Airport.

## **STATE AID TO AIRPORTS**

In support of the state airport system, the State of Arizona also participates in airport improvement projects. The source for State airport improvement funds is the Arizona Aviation Fund. Taxes levied by the State on aviation fuel, flight property, aircraft registration tax, and registration fees, (as well as interest on these funds) are deposited in the Arizona Aviation Fund. The State Transportation Board establishes the policies for distribution of these State funds. The Arizona Legislature has, at times, redirected some of this fund to the State's General Fund, utilizing it for non-aviation purposes. This effectively reduces the money available to Arizona airports for improvements.

Under the State of Arizona grant program, an airport can receive funding for one-half (4.47 percent) of the local share of projects receiving federal AIP funding. The State also provides 90 percent funding for various projects which are not eligible for AIP funding.

### **State Airport Loan Program**

The Arizona Department of Transportation - Aeronautics Division (ADOT) has established an Airport Loan Program. This program is currently on hold pending additional funding. It was initiated to enhance the

utilization of State funds and provide a flexible funding mechanism to assist airports in funding improvement projects. Eligible projects include runway, taxiway, and apron improvements; land acquisition, planning studies, and the preparation of plans and specifications for airport construction projects, as well as revenue generating improvements such as hangars and fuel storage facilities. Projects which are not currently eligible for the State Airport Loan Program are considered if the project would enhance the airport's ability to be financially self-sufficient.

This program was suspended by ADOT in FY 1997-1998 due to a reduction of funds resulting from the diversion of 50 percent of the Flight Property Tax to the State General Fund. The program is expected to resume on a somewhat limited basis beginning in FY 2003-2004 (starts July 2002), depending on cash flow generated to the program from the Flight Property Tax. Projected revenues from the tax, however, are lower than previous forecasts due to the reduction in commercial flight schedules following the events of September 11, 2001. It is the intent of the State legislature (as defined in State Senate Bill 1251 - amended Summer 2001) to redirect 100 percent of the Flight Property Tax from the state general fund to the aviation fund beginning in FY 2003-2004. This intent may change as the State addresses significant on-going budget concerns.

When available previously, there were three ways in which the loan funds could be used: Grant Advance, Matching Funds, or Revenue

Generating Projects. The Grant Advance loan funds were provided when an airport could demonstrate the ability to accelerate the development and construction of a multi-phase project. The project(s) had to be compatible with the Airport Master Plan and included in the ADOT 5-year Airport Development Program. The Matching Funds were provided to meet the local matching fund requirement for securing federal airport improvement grants or other federal or state grants. The Revenue Generating funds were provided for airport-related construction projects that are not eligible for funding under another program. The availability of funds through this program has historically been subject to the aviation revenues generated in the State. For purposes of this study, it is assumed that the same guidelines will continue to apply through the planning period, when such funds are available.

## **LOCAL FUNDING (City of Sierra Vista)**

The balance of project costs, after consideration has been given to available grants, must be funded through local resources. For most airports, there are several alternatives for local finance options for future development at the airport, including airport revenues, bonds, and leasehold financing.

There are several types of revenue bonds. In general, they are a form of municipal bond which is payable solely from the revenue derived from the operation of a facility that was constructed or acquired with the

proceeds of the bonds. For example, a Lease Revenue Bond is secured with the income from a lease assigned to the repayment of the bonds. Revenue bonds have become a common form of financing airport improvements. They present the opportunity to provide those improvements without direct burden to the taxpayer. One drawback of revenue bonds is that they normally carry a higher interest rate, because they lack the guarantees of general and limited obligation bonds.

Leasehold financing refers to a developer or tenant financing improvements under a long-term ground lease. The obvious advantage of such an arrangement is that it relieves the City of Sierra Vista of all responsibility for raising the capital funds for improvements; however, the private development of facilities on a ground lease, particularly on property owned by a government agency, produces a unique set of problems. In particular, it is more difficult to obtain private financing as only the improvements and the right to continue the lease can be claimed in the event of a default. Ground leases normally provide for the reversion of improvements to the lessor at the end of the lease term, which reduces their potential value to a lender taking possession.

## **FINANCING ASSUMPTIONS**

The underlying strategy used to develop the financial feasibility of the capital improvement program involves first applying projected annual entitlement funding to eligible project costs.

Potential state funding is then considered. The net balances of AIP eligible costs, local matching shares, and the costs of non-eligible projects result in the remaining costs to be funded.

**Table 6C** outlines the maximum potential FAA entitlement funding that could be attained during each planning horizon based upon the activity levels forecast. Matching share funding from

the state is also included. This analysis assumes that the Stage I activity growth would be accomplished by 2007; Stage II by the year 2012; Stage III by the year 2017, and Stage IV by 2022. FAA and ADOT eligible projects equal approximately 72 percent (\$26.9 million) of the total development costs through the end of the 20-year planning horizon. Meanwhile, local funding required for the planning period totals approximately \$10.2 million.

<b>TABLE 6C Financial Plan Assumptions (2002 \$)</b>					
	<b>Stage I</b>	<b>Stage II</b>	<b>Stage III</b>	<b>Stage IV</b>	<b>Totals</b>
<b>Total Development Costs</b>	<b>\$15,450,350</b>	<b>\$11,055,650</b>	<b>\$8,057,700</b>	<b>\$2,560,000</b>	<b>\$37,123,700</b>
FAA Grant Eligible	\$9,203,151	\$7,967,032	\$6,312,825	\$1,648,186	\$25,131,194
AIP Entitlements <sup>1,2</sup>	\$6,668,300	\$5,000,000	\$5,000,000	\$5,000,000	\$21,668,300
ADOT Eligible	\$445,724	\$363,856	\$829,927	\$80,907	\$1,720,414
Remaining Grant Eligible Costs	\$2,534,851	\$2,967,032	\$1,312,825	\$0	\$6,814,708
Non-eligible and Matching Local Share Costs	\$5,801,475	\$2,714,662	\$912,639	\$830,907	\$10,259,683
Note: <sup>1</sup> Includes funds committed to by FAA for FY2003 for the VOR, Airport Rotating Beacon, and security fence around the airfield. <sup>2</sup> An additional \$1,000,000/year is available once enplanements return to 10,000 or higher annually, as projected.					

## ***OPERATING REVENUES AND EXPENSES***

### **2001 RATES AND CHARGES ANALYSIS REVIEW**

As part of this Master Plan Update, a Rates and Charges Analysis of the Sierra Vista Municipal Airport was conducted by Bruce D. Greenberg, Inc., Real Estate Appraisers and Consultants. The purpose of this analysis was to estimate fair market

rent at Sierra Vista Municipal Airport in order to comply with the U.S. Inspector General's special report on "Airport Revenue Diversion and Self-Sufficiency of Airport Fees and Charges."

The rates and charges appraisal evaluated terminal facilities, tiedowns, hangars, and fuel flowage fees, as well as overall land and building value. It was recommended that the market rates be the objective on all new and

renegotiated leases; however, this would need to be adjusted by the supply and demand of each facility.

Based on the recommendations in the previous Appraisal Report, short-term leases (less than one year) should be based on market rental rates. Mid-term leases (one to five years) should also be based on market rental rates and should include provisions for annual increases based on changes to the Consumer Price Index (CPI). Long-term leases (in excess of five years) should be based on market rental rates and have provisions for annual CPI increases in addition to periodic (two to four years) re-evaluations. The study also recommends that lease contracts should contain provisions for the acquisition of any privately constructed buildings or hangars after a reasonable length of time. Lease agreements should allow sufficient time for the private investor to amortize the debt and include incentives for complying with airport rules and procedures. It is recommended that the City continue to follow these recommendations.

**Table 6D, Fee Schedule**, compares the existing fee schedule with that of the 2001 Rates and Charges Analysis and the fees recommended in this Master Plan Update.

## **OPERATING REVENUE**

The Sierra Vista Municipal Airport currently derives revenues from the following sources: Business (Operator's)

License Fees, Gate Fees, Fuel Flowage Fees, Terminal Leases, Hangar Fees, Aviation Ground Services (FBO) Leases, and miscellaneous. With acquisition of the adjacent 203 acres, the Airport will be able to obtain additional revenues from the new users. A brief description of each revenue category is outlined in the following sections.

### **Airline Gate Fees**

Air carriers operating into Sierra Vista Municipal Airport are charged \$3.00 per scheduled flight gate fee for the utilization of apron space. Future revenue from this item was estimated based on the forecast annual number of commercial service landings through the planning period.

### **Airline Ticket Counter Leases**

The commercial terminal building at Sierra Vista Municipal Airport is currently designed with three airline ticket counter areas. Of these, only one is currently leased. The other two are available for airlines, charters, or other terminal users (these are charged at a higher rate, see discussion below). For the purposes of this analysis, it is assumed that only one counter is leased to an airline until Stage II, when an additional airline/charter is expected to lease a second counter for the remainder of the planning period. The recommended lease rate is as identified by the Rates and Charges Analysis.



**TABLE 6D****Fee Schedule - Sierra Vista Municipal Airport**

<b>Item</b>	<b>Current City Rates</b>	<b>2001 Appraisal Report</b>	<b>Recommended Fee</b>
<b>Commercial Service Area</b>			
<b>Terminal Building:</b>			
Airline Ticket Counter	\$14.52/sf./year	\$18.00/sf./year	\$18.00/sf./year
Rental Car Counter	\$9.00/sf./year	\$18.00/sf./year	\$13-18.00/sf./year
Arcade	N/A	35% of gross	20-35% of gross
Automobile Parking	N/A	N/A	N/A
<b>General Aviation Area</b>			
<b>FBO Lease</b>	\$26,400/year <sup>1</sup>	\$20,500/year	\$26,400/year
<b>Individual Hangars:</b>			
Small (1,316 sf.))	\$203/month	\$210/month	\$210/month
Medium (1,511 sf.)	\$223/month	\$245/month	\$245/month
Large (1,627 sf.)	\$233/month	\$255/month	\$255/month
Double (2,632 sf.)	\$398/month	\$380/month	\$398/month
<b>Monthly Tiedowns:</b>			
Single Engine	\$15/month	\$32/month	\$23-32/month
Multi Engine	\$25/month	\$47/month	\$36-47/month
Large Aircraft	\$33/month	\$75/month	\$65-75/month
Narrow body Jets (727, 737, DC 9)	N/A	\$150/month	\$150/month
Wide body Jets (DC 10)	N/A	\$250/month	\$250/month
<b>Daily Tiedowns:</b>			
Single Engine	\$2/day	\$4/day	\$4/day
Multi Engine	\$3/day	\$5/day	\$5/day
Large Aircraft	\$4.50/day	\$10/day	\$10/day
<b>Fuel Flowage</b>	\$0.05/gallon	\$0.05/gallon	\$0.05/gallon
<b>Land Leases</b>			
<b>In Existing General Aviation Area:</b>			
Civil Air Patrol Site	\$0	\$7,700/year	\$0
Life Net Site (Land Only)	\$3,624.40 (mo-mo)	\$2,400/year	\$2,400
Land near FBO	N/A	\$4,950/year	\$4,950/year
Land Between Hangars	N/A	\$9,200/year	N/A (proposed taxiway)
<b>In Existing Large Aircraft Parking Area</b>	N/A	\$31,700/year	N/A (part Taxiway D extension and part Federal Agencies/large aircraft apron)

<b>TABLE 6D (Continued)</b> <b>Fee Schedule - Sierra Vista Municipal Airport</b>			
<b>Item</b>	<b>Current City Rates</b>	<b>2001 Appraisal Report</b>	<b>Recommended Fee</b>
<b>Commercial Service Area</b>			
<b>In 203-Acre Acquisition Area:</b>			
GA (1.5 ac. site, typical)		\$15,000/year	\$15,000/year
Aircraft Conversion and Maintenance (40 ac. site, typical)	N/A	\$87,120/year	\$87,120/year
Air Cargo (2 ac. site, typical)		\$12,200/year	\$12,200/year
Federal Agencies (10 ac. site, typical)		\$34,850/year	\$34,850/year
<b>Utility</b>			
<b>Water Utility</b>			
First 1,000 gallons	N/A	\$12.25/month	\$12.25/month
Subsequent 1,000 gallons		\$1.75/month	\$1.75/month
Notes: <sup>1</sup> Includes 12 tiedowns			

### **Rental Car Counter/Office Leases**

The commercial terminal building is also designed with three rental car ticket counter areas. Again, of these, only one is currently leased. For the purposes of this analysis, it is assumed that for the majority of the first stage, only one counter will be leased, using the lease rate identified in the Rates and Charges Analysis by the year 2004. A second counter is added at the end of the first stage, and the third at the end of the third stage.

### **Arcade**

The 2001 Rates and Charges Analysis identified a rate of 35% of sales for the

arcade area of the commercial terminal building. While it is recommended to implement the Rates and Charges recommendations as reasonable and feasible, for the purposes of this analysis, no income was assumed from this use.

### **Terminal Building Leases**

The airport revenue received from tenants (other than airlines and rental car companies) in the terminal building is currently based on an annual fee of \$22.00/square foot/month. Currently, other than one airline and one rental car company, there are no lease holders in the terminal building.

### **FBO Hangar Facility Lease**

Double Eagle Aviation currently has a lease agreement (expires December 30, 2003 with options for renewal) for the FBO Hangar Facilities at the Airport. The City originally constructed the FBO facility utilizing the ADOT Airport Loan Program. The leased facility includes a maintenance hangar, office space, classroom/parts room, restrooms, and pilots lounge in a 4,888 sf. building on a 31,400 sf. building site, plus twelve tiedowns adjacent to the hangar to rent to permanent and transient aircraft, and a portion of a paved parking lot. The FBO lease requires payment of \$2,200/month for the 4,888 sf. hangar facility plus \$120/month for the apron, for a total of \$27,840/year, exclusive of the fuel flowage fee.

From the \$27,840/year market value of the “leased” facilities the airport must make a \$27,103/year loan repayment to ADOT until the year 2009, leaving a net revenue to the airport of \$737.

### **Tiedown Leases**

Tiedown fees are provided from two sources: local tiedowns and transient tiedowns. Locally based aircraft currently pay between \$15.00 and \$33.00 per month per tiedown. As outlined in the Appraisal Report, these fees should be increased to \$32.00/month for single engine aircraft, \$47.00/month for multi-engine aircraft, and \$75/month for large aircraft. It would not be prudent to double the tiedown fee in one step because of the negative reaction that might be engendered in the airport’s customers. It is recommended, however, that the fair

market fees identified in the Rates and Charges Analysis be implemented by the year 2004. Additional monthly tiedown rates are provided for the storage of commercial jet-sized aircraft: \$150/month for narrow body and \$250/month for wide body.

The transient tiedown fees currently range from \$2.00/day for single engine aircraft to \$4.50 for aircraft over 12,500 pounds and all jet aircraft. It is recommended that these fees be increased to \$4.00/day for single engine aircraft, \$5.00/day for multi-engine aircraft, and \$10.00/day for aircraft over 12,500 pounds, consistent with the Rates and Charges Analysis (see **Table 6E**). These fees should be implemented by FY 2003.

### **General Aviation Hangar Fees**

The single aircraft storage hangars at the Airport were constructed by the City using the ADOT Airport Loan Program. The hangars constructed in 1991 require an annual loan repayment of \$12,460 until the year 2007 while those constructed in 1995 require \$21,080 per year until 2014.

The City currently leases to aircraft owners 32 small (1,316 sf.) hangars at \$195.00/month, two medium (1,511 sf.) hangars at \$223.00/month, six large (1,627 sf.) At \$233.00/month, and one double (3,055 sf.) hangar at \$398.00/month. The double hangar is presently leased (equally) to two individuals. The terms for these leases are month-to-month and do not include tax or utility costs. The Rates and Charges Analysis recommended an increase in these fees, as identified in

**TABLE 6E**  
**CASH FLOW ANALYSIS - STAGES I AND II**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>OPERATING REVENUE</b>										
General Aviation Areas										
FBOs	\$26,400	\$26,400	\$26,400	\$26,400	\$26,400	\$26,400	\$26,400	\$26,400	\$26,400	\$41,400
Hangars	\$108,672	\$109,656	\$109,656	\$109,656	\$109,656	\$142,056	\$142,056	\$187,416	\$187,416	\$187,416
Tiedowns	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200	\$9,120	\$9,120	\$9,120	\$9,120	\$9,120
Fuel Flowage	\$11,495	\$12,211	\$12,973	\$13,617	\$14,292	\$15,001	\$15,746	\$16,528	\$17,213	\$17,927
<b>Subtotal GA Areas</b>	<b>\$153,767</b>	<b>\$155,467</b>	<b>\$156,229</b>	<b>\$156,873</b>	<b>\$157,548</b>	<b>\$192,577</b>	<b>\$193,322</b>	<b>\$239,464</b>	<b>\$240,149</b>	<b>\$255,863</b>
Commercial Terminal Area										
Airline Gate Fees	\$3,720	\$3,924	\$4,140	\$4,221	\$4,302	\$4,336	\$4,473	\$4,560	\$4,605	\$4,653
Airline Counter/Office	\$9,504	\$9,504	\$9,504	\$9,504	\$9,504	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964
Rental Car Counter/Office	\$1,326	\$1,836	\$1,836	\$1,836	\$3,672	\$3,672	\$3,672	\$3,672	\$3,672	\$3,672
Terminal Building Leases	\$0	\$0	\$0	\$0	\$0	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340
<b>Subtotal Commercial Areas</b>	<b>\$14,550</b>	<b>\$15,264</b>	<b>\$15,480</b>	<b>\$15,561</b>	<b>\$17,478</b>	<b>\$36,312</b>	<b>\$36,449</b>	<b>\$36,536</b>	<b>\$36,581</b>	<b>\$36,629</b>
Ground Leases										
GA Ground Lease	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal Agencies	\$0	\$34,850	\$34,850	\$34,850	\$34,850	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700
Aircraft Conversion/Maint.	\$0	\$0	\$0	\$0	\$0	\$0	\$87,120	\$87,120	\$163,350	\$163,350
Air Cargo	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Assembly/Fabrication	\$0	\$0	\$0	\$0	\$0	\$0	\$54,900	\$54,900	\$54,900	\$54,900
<b>Subtotal Ground Leases</b>	<b>\$0</b>	<b>\$34,850</b>	<b>\$34,850</b>	<b>\$34,850</b>	<b>\$34,850</b>	<b>\$69,700</b>	<b>\$211,720</b>	<b>\$211,720</b>	<b>\$287,950</b>	<b>\$287,950</b>
Other										
Business License Fee	\$500	\$500	\$500	\$500	\$500	\$600	\$750	\$1,000	\$1,150	\$1,300
Miscellaneous	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
<b>Subtotal Other</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$1,000</b>	<b>\$1,100</b>	<b>\$1,250</b>	<b>\$1,500</b>	<b>\$1,650</b>	<b>\$1,800</b>
<b>TOTAL OPERATING REVENUE</b>	<b>\$169,317</b>	<b>\$206,581</b>	<b>\$207,559</b>	<b>\$208,284</b>	<b>\$210,876</b>	<b>\$299,689</b>	<b>\$442,741</b>	<b>\$489,220</b>	<b>\$566,330</b>	<b>\$582,242</b>
<b>OPERATING EXPENSES</b>										
Salary, Wages, and Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$105,000	\$110,250
Operation and Maintenance	\$71,925	\$75,521	\$79,297	\$83,262	\$87,425	\$91,797	\$96,386	\$101,206	\$106,266	\$111,579
Utilities and Contractual Services	\$57,140	\$59,997	\$62,997	\$66,147	\$69,454	\$72,927	\$76,573	\$80,402	\$84,422	\$88,643
Supplies	\$13,745	\$14,157	\$14,582	\$15,020	\$15,470	\$15,934	\$16,412	\$16,905	\$17,412	\$17,934
Debt Service Expenses	\$60,643	\$60,643	\$85,249	\$85,249	\$85,249	\$100,849	\$100,249	\$105,451	\$105,451	\$127,885
<b>TOTAL OPERATING EXPENSES</b>	<b>\$203,453</b>	<b>\$210,319</b>	<b>\$242,125</b>	<b>\$249,677</b>	<b>\$257,598</b>	<b>\$281,507</b>	<b>\$289,621</b>	<b>\$403,963</b>	<b>\$418,551</b>	<b>\$456,291</b>
<b>EXCESS (DEFICIT)</b>	<b>(\$34,136)</b>	<b>(\$3,738)</b>	<b>(\$34,566)</b>	<b>(\$41,393)</b>	<b>(\$46,722)</b>	<b>\$18,182</b>	<b>\$153,120</b>	<b>\$85,257</b>	<b>\$147,779</b>	<b>\$125,951</b>



**Table 6D.** As the recommended rates for the medium and large hangars are approximately nine percent higher than the current rates, consideration should be given to implementing these over a two-year period.

Future leases should include an annual adjustment to keep pace with market increases so the adjustment when leases are renewed is minimal. Based on current market conditions, an adjustment of three percent per year is reasonable.

### **Fuel Flowage Fees**

Aircraft fuel service is currently provided by the FBO. The Airport collects a fuel flowage fee from the FBO of \$0.12/gallon for both AvGas and JetA fuel (of this, \$0.07/gallon is for the cost and maintenance of the fuel farm and \$0.05/gallon is assigned to offset the capital investment, and the operation and maintenance costs of the Airport). The fuel flowage fee is paid to the Airport to help offset the capital investment, operation and maintenance costs of the fuel farm and the Airport. As used in this analysis, only the \$0.05/gallon portion of the fee is applied to the Airport's cash flow.

Also, while fuel service is provided by the FBO, for the purposes of this analysis, its associated fee is addressed separately. In 2000, approximately 150,000 gallons of fuel was pumped, resulting in a fuel flowage fee of \$18,000. Of this total, \$10,500 was applied to the continued operation and maintenance of the fuel farm and \$7,500 was applied to the Airport operating and maintenance costs.

### **Ground Leases**

Previous chapters detailed future development within the 203-acre property acquisition area. Approximately 75 percent (150 acres) of this property is expected to be developed by the end of the long term planning period. Based on the conclusions in the 2001 Appraisal Report, annual leases should be determined based on the type of user (see **Table 6D**). The cash flow analysis that follows assumes that, other than the general aviation areas, approximately ten acres will be newly leased each year until build out (under the conditions of the 2001 Environmental Assessment) is completed.

### **Business (Operator's) License Fee**

Businesses that operate at Sierra Vista Municipal Airport are required to obtain an airport business license. This serves as the agreement between the business operator and the Airport setting forth the terms and conditions for allowing the business to operate on the airport. The license agreements establish the insurance, facilities, level of service, reporting, and similar requirements for the particular type of business operation being licensed. The City currently charges a \$50 annual fee for a business license.

### **Miscellaneous**

Miscellaneous revenues are those fees not associated with the other categories; examples include the sale of security access cards and fees for special events held at the airport. For planning

purposes, this revenue category will be projected at \$500.00 per year.

## **OPERATING EXPENSES**

The operating expenses incurred at Sierra Vista Municipal Airport are summarized in the following categories: Salary, Wages, and Benefits, Operation and Maintenance, Utilities and Contractual Services, Supplies, and Debt Service. Each airport expense category is briefly described in the following section.

### **Salary, Wages, and Benefits**

The cost of operating the Airport is currently distributed amongst a number of City departments, primarily Public Works, but including City Finance (accounting services), City Clerk (revenue collection), and City Attorney (legal services). The City employs no full-time airport personnel at this time. This is expected to change as the Airport continues to develop and full-time staff is needed to oversee the property. We anticipate that full-time personnel will be needed during the planning period, with full-time staffing beginning in Stage II.

### **Operation and Maintenance**

Operation and maintenance is the direct and indirect cost of operating and maintaining the Airport. Direct costs include general building and equipment maintenance, advertising, and similar expenditures made directly by the airport. Indirect costs include such things as landscape maintenance which

is provided by the City's Parks and Leisure Services Department, janitorial services provided by the City's Building Maintenance Section, and similar operation or maintenance activities provided by other City operations. Maintenance of the FBO hangar is the responsibility of the tenant. Airport O&M approved for FY 2001/2002 was \$31,782. For planning purposes it will be assumed such costs will increase at the rate of five percent per year due to the aging of the airport facilities and construction of additional City-operated facilities.

### **Utilities and Contractual Services**

Costs for water, sewer, power, natural gas, and communications are all included under this category. This category also includes any outsourcing for professional services. In FY 2001/2002, the City approved \$35,650 for utilities plus an additional \$19,807 for professional services, for a total of \$55,457. For planning purposes, it is assumed that these costs will also increase at the rate of five percent per year due to the planned Airport development.

### **Supplies**

This category includes expenditures for capital items needed for the operation of the Airport, but excludes major capital improvements. Examples of operating capital expenses include cleaning equipment, signs, specialized supplies, etc. Airport Operating Capital varies from year-to-year based on the age and need for capital equipment. For FY

2001/2002 Operating Capital expenditures were approved at \$8,095.

### **Debt Service Expenses**

The Debt Service category includes the cost associated with the payment and interest fees of the ADOT Loan Program used to construct the hangars at Sierra Vista Municipal Airport. This expense is anticipated to fluctuate during the planning period with the construction of additional hangars using ADOT loans and with the retirement of existing ADOT loans. New ADOT loans were assumed to be for 15 year periods at a rate similar to the latest loan rate.

### ***CASH FLOW ANALYSIS***

The cash flow analysis is presented in **Table 6E** (Stages I and II) and **Table 6F** (Stages III and IV), illustrates the revenue/expense projections throughout the planning period. As shown in **Table 6E**, the cost of operating the airport will exceed the anticipated revenues during the first six years of the planning period. The ideal and ultimate goal of any airport should be to support its own operation through self-generated user fees; however, reasonable fees need to be established in order to keep the airport competitive.

There is a general tendency to raise rates and fees when income cannot meet the expenses of operation. Caution should be used when considering a rate or fee that is higher than the

market condition. Higher fees may result in a short-term revenue increase but can be detrimental in the long-run by discouraging new business and/or causing the relocation of established businesses.

### ***PLAN IMPLEMENTATION***

The successful implementation of the Sierra Vista Municipal Airport Master Plan will require sound judgment on the part of the City of Sierra Vista with regard to implementation of projects to meeting future activity demands, while maintaining the existing infrastructure and improving this infrastructure to support new development.

While the projects included in this capital improvement program have been broken into four stages, the City will need to consider the scheduling of projects in a flexible manner and add new projects from time-to-time to satisfy safety or design standards, or newly created demands (such as the recent security requirements following the events of September 11, 2001).

In summary, the planning process requires that the City of Sierra Vista continually monitor the need for new or rehabilitated facilities, since applications (for eligible projects) must be submitted to the FAA and ADOT each year. The City of Sierra Vista should continually monitor, with the FAA, the projects which are required for safety and certification under FAR Part 139.

**TABLE 6F**  
**CASH FLOW ANALYSIS - STAGES III AND IV**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>OPERATING REVENUE</b>										
General Aviation Areas										
FBOs	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400	\$41,400
Hangars	\$187,416	\$187,416	\$240,336	\$240,336	\$240,336	\$240,336	\$510,336	\$510,336	\$510,336	\$510,336
Tiedowns	\$11,040	\$11,040	\$11,040	\$11,040	\$11,040	\$12,960	\$12,960	\$12,960	\$12,960	\$12,960
Fuel Flowage	\$18,670	\$19,444	\$20,250	\$21,089	\$21,964	\$22,874	\$28,822	\$24,810	\$25,839	\$26,910
<b>Subtotal GA Areas</b>	<b>\$258,526</b>	<b>\$259,300</b>	<b>\$313,026</b>	<b>\$313,865</b>	<b>\$314,740</b>	<b>\$317,570</b>	<b>\$593,518</b>	<b>\$589,506</b>	<b>\$590,535</b>	<b>\$591,606</b>
Commercial Terminal Area										
Airline Gate Fees	\$4,698	\$4,746	\$4,794	\$4,842	\$4,890	\$4,941	\$4,989	\$5,040	\$5,091	\$5,142
Airline Counter/Office	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964	\$17,964
Rental Car Counter/Office	\$3,672	\$3,672	\$3,672	\$5,508	\$5,508	\$5,508	\$5,508	\$5,508	\$5,508	\$5,508
Terminal Building Leases	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340	\$10,340
<b>Subtotal Commercial Areas</b>	<b>\$36,674</b>	<b>\$36,722</b>	<b>\$36,770</b>	<b>\$38,654</b>	<b>\$38,702</b>	<b>\$38,753</b>	<b>\$38,801</b>	<b>\$38,852</b>	<b>\$38,903</b>	<b>\$38,954</b>
Ground Leases										
GA Ground Lease	\$0	\$15,000	\$30,000	\$45,000	\$60,000	\$75,000	\$90,000	\$105,000	\$120,000	\$135,000
Federal Agencies	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700	\$69,700
Aircraft Conversion/Maint.	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350	\$163,350
Air Cargo	\$0	\$12,200	\$24,400	\$36,600	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900
Assembly/Fabrication	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900	\$54,900
<b>Subtotal Ground Leases</b>	<b>\$287,950</b>	<b>\$315,150</b>	<b>\$342,350</b>	<b>\$369,550</b>	<b>\$402,850</b>	<b>\$417,850</b>	<b>\$432,850</b>	<b>\$447,850</b>	<b>\$462,850</b>	<b>\$477,850</b>
Other										
Business License Fee	\$1,500	\$1,750	\$2,000	\$2,250	\$2,500	\$2,750	\$3,000	\$3,250	\$3,500	\$3,750
Miscellaneous	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
<b>Subtotal Other</b>	<b>\$2,000</b>	<b>\$2,250</b>	<b>\$2,500</b>	<b>\$2,750</b>	<b>\$3,000</b>	<b>\$3,250</b>	<b>\$3,500</b>	<b>\$3,750</b>	<b>\$4,000</b>	<b>\$4,250</b>
<b>TOTAL OPERATING REVENUE</b>	<b>\$585,150</b>	<b>\$613,422</b>	<b>\$694,646</b>	<b>\$724,819</b>	<b>\$759,292</b>	<b>\$777,423</b>	<b>\$1,068,669</b>	<b>\$1,079,958</b>	<b>\$1,096,288</b>	<b>\$1,112,660</b>
<b>OPERATING EXPENSES</b>										
Salary, Wages, and Benefits	\$190,763	\$200,301	\$210,316	\$220,831	\$231,873	\$243,467	\$330,640	\$347,172	\$364,531	\$382,757
Operation and Maintenance	\$117,158	\$123,016	\$129,167	\$135,625	\$142,407	\$149,527	\$157,003	\$164,853	\$173,096	\$181,751
Utilities and Contractual Services	\$93,075	\$97,729	\$102,615	\$107,746	\$113,133	\$118,790	\$124,729	\$130,966	\$137,514	\$144,390
Supplies	\$18,472	\$19,026	\$19,597	\$20,185	\$20,791	\$21,414	\$22,057	\$22,718	\$23,400	\$24,102
Debt Service Expenses	\$127,885	\$127,885	\$144,494	\$144,494	\$144,494	\$144,494	\$179,008	\$179,008	\$179,008	\$179,008
<b>TOTAL OPERATING EXPENSES</b>	<b>\$547,353</b>	<b>\$567,957</b>	<b>\$606,189</b>	<b>\$628,882</b>	<b>\$652,697</b>	<b>\$677,692</b>	<b>\$813,437</b>	<b>\$844,718</b>	<b>\$877,549</b>	<b>\$912,008</b>
<b>EXCESS (DEFICIT)</b>	<b>\$37,797</b>	<b>\$45,465</b>	<b>\$88,457</b>	<b>\$95,937</b>	<b>\$106,595</b>	<b>\$99,731</b>	<b>\$255,232</b>	<b>\$235,240</b>	<b>\$218,739</b>	<b>\$200,652</b>





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